

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

POLARIS POWERLED TECHNOLOGIES,  
LLC,

*Plaintiff,*

V.

SAMSUNG ELECTRONICS AMERICA,  
INC., SAMSUNG ELECTRONICS CO.,  
LTD., SAMSUNG DISPLAY CO., LTD.,

*Defendants.*

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CIVIL ACTION NO. 2:22-CV-00469-JRG

## MEMORANDUM OPINION AND ORDER

Before the Court is the Motion to Strike Defendants’ Second Supplemental Invalidity Contentions (the “Motion”) filed by Plaintiff Polaris PowerLED Technologies, LLC (“Plaintiff”). (Dkt. No. 106). In the Motion, Plaintiff moves to strike Defendants’ Samsung Electronics America, Inc., Samsung Electronics Co., Ltd., and Samsung Display Co., Ltd. (“Samsung” or “Defendants”) Second Supplemental Invalidity Contentions’ inclusion of PCT International Publication No. WO 2007/125451 (“Groot Hulze ’451”) and U.S. Pat. App. Pub. No. 2007/0262732 (“Shen ’732”). (Dkt. No. 106 at 1).

## I. BACKGROUND

On June 15, 2023, the Court entered an agreed-upon Discovery Order in this case establishing certain rules regarding discovery. (Dkt. No. 44). Relevant for this dispute is Paragraph 3(a) of the Discovery Order. Paragraph 3(a) contains two sub-provisions as shown below:

**3. Additional Disclosures.** Without awaiting a discovery request, each party will make the following disclosures to every other party: (a) provide

the disclosures required by the Patent Rules for the Eastern District of Texas with the following modifications to P.R. 3-1 and P.R. 3-3:

- i. If a party claiming patent infringement asserts that a claim element is a software limitation, the party need not comply with P.R. 3-1 for those claim elements until 30 days after source code for each Accused Instrumentality is produced by the opposing party. Thereafter, the party claiming patent infringement shall identify, on an element-by-element basis for each asserted claim, what source code of each Accused Instrumentality allegedly satisfies the software limitations of the asserted claim elements.
- ii. If a party claiming patent infringement exercises the provisions of Paragraph 3(a)(i) of this Discovery Order, the party opposing a claim of patent infringement may serve, not later than 30 days after receipt of a Paragraph 3(a)(i) disclosure, supplemental “Invalidity Contentions” that amend only those claim elements identified as software limitations by the party claiming patent infringement.

(Dkt. No. 44 at 2-3). In short, Paragraph 3(a)(i) provides that Plaintiff need not comply with P.R. 3-1 for claim elements that Plaintiff asserts are software limitations “until 30 days after source code for each Asserted Instrumentality is produced by the opposing party.” (*Id.*). This rule recognizes that source code is often critical to a plaintiff crystalizing its infringement theories and accordingly provides free leave for the plaintiff to amend its infringement contentions within thirty days of receiving such source code. Paragraph 3(a)(ii) is the corollary for Defendants, stating that Defendants “may serve, not later than 30 days after receipt of a Paragraph 3(a)(i) disclosure, supplemental ‘Invalidity Contentions’ that amend only those claim elements identified as software limitations by [Plaintiff].” (*Id.*).

On January 8, 2024, Plaintiff served its First Supplemental Infringement Contentions under Paragraph 3(a)(i), indicating that every claim element of the ’887 Patent was a software limitation. (Dkt. No. 106 at 5, 11); (Dkt. No. 119 at 3). Defendants do not dispute that Plaintiff properly served its Paragraph 3(a)(i) disclosure pursuant to the Discovery Order. On February 7, 2024, thirty days after Plaintiff served its First Supplemental Infringement Contentions under Paragraph

3(a)(i), Defendants served their Second Supplemental Invalidity Contentions pursuant to Paragraph 3(a)(ii), which now cited Groot Hulze '451 and Shen '732. (Dkt. No. 119 at 4).

## II. DISCUSSION

The only dispute between the parties is whether Defendants properly served their Second Supplemental Invalidity Contentions under Paragraph 3(a)(ii). While the parties expend many pages of briefing on this issue, it can be resolved by answering one question: are Defendants' amendments mapping the Groot Hulze '451 and Shen '732 references to the '887 Patent responsive to Plaintiff's source code additions? On the specific facts before it, the Court finds that the answer is "yes."

Plaintiff argues that "Samsung's Second Supplemental Invalidity Contentions should be stricken because the addition of the Groot Hulze '451 and Shen '732 references are *not* permitted by paragraph 3(a)(ii) . . . as they are unrelated to Polaris' First Supplemental Infringement Contentions." (Dkt. No. 106 at 1). With respect to the Groot Hulze '451 reference, Plaintiff argues that its addition is unrelated because Defendants "sought to add the reference months before Polaris' First Supplemental Infringement Contentions were even served" under P.R. 3-6(b) based on Plaintiff's purported disclaimer during a related IPR proceeding. (*Id.* at 1-2). With respect to the Shen '732 reference, Plaintiff argues that its addition is unrelated because "[t]he Shen '732 reference does not discuss specific software implementations, and thus its relevance did not change when Polaris added source code citations in its First Supplemental Infringement Contentions." (*Id.* at 2).

Defendants contend that its Second Supplemental Infringement Contentions "provide detailed contentions on an element-by-element basis explaining how [the Groot Hulze '451 and Shen '732 references] are responsive to Polaris's supplemental infringement contentions." (Dkt.

No. 119 at 5). For instance, Defendants’ note that their contentions contain language like the following:

Polaris’s supplemental contentions, dated January 8, 2024, assert that this claim element is purportedly satisfied by certain portions of Samsung’s source code. For example, Polaris asserts that source code implementing alleged luminance control functions, such as pixel compensation and global dimming purportedly satisfy this claim element. As another example, Polaris asserts that source code implementing alleged pixel brightness control functions purportedly satisfy this claim element. As another example, Polaris asserts that source code implementing alleged dynamic backlight control functions purportedly satisfy this claim element. As another example, Polaris asserts that source code implementing alleged PWM frequency setting functions purportedly satisfy this claim element. Polaris’s new evidence and arguments that make clear that [Groot Hulze ’451/Shen] is relevant prior art that discloses and/or teaches this claim element, and renders this claim obvious, at least under the contentions presented by Polaris, for at least the reasons explained further in this claim chart and as discussed below.

(*Id.* at 9 (quoting Dkt. No. 106-6 (Exhibit A16 to Samsung’s February 7, 2024 Invalidity Contentions) at 14-15; Dkt. No. 106-7 (Exhibit A17 to Samsung’s February 7, 2024 Invalidity Contentions) at 16-17)).

In addition to these narratives, Defendants provide the example that “in [Plaintiff’s] supplemental source code contentions, Polaris for the first time identified [] software in Samsung’s accused products as allegedly being directed to ‘dynamic backlight’ control.” (*Id.* at 10). Defendants contend that “[d]irectly in response, Samsung identified the same functionality disclosed by Groot Hulze ’451” and Shen ’732:

As another example, Groot Hulze '451 teaches circuitry to dynamically adjust backlights. 7:19-30

The person skilled in the art realizes that the present invention by no means is limited to the preferred embodiments described above. On the contrary, many modifications and variations are possible within the scope of the appended claims. For example, the present invention may also be combined with 0-, 1- or 2-dimensional dynamic backlighting algorithms to reduce LC-leakage (black level) and to save power. Dimming by amplitude control is straight forward as the primary and secondary pulses should be dimmed with the same factor. Dimming per duty cycle is more complex because the first harmonic of the pulse arrangement needs not to be linear proportional to its duty cycle. A preferred dimming strategy is a combination of duty and amplitude control, reducing the duty cycle of the primary pulse arrangement and lowering the amplitude of the secondary pulse arrangement equally to the

(Dkt. No. 119 at 11 (citing Dkt. No. 106-6)).

As another example, Shen teaches circuitry to dynamically adjust backlights. ¶5, 6

It is well known that LCDs are hold-type display device due to the retardation property of the liquid crystal molecules. Compared to the impulse-type display devices such as cathode ray tube (CRT) displays, the dynamic response (i.e., the display quality of dynamic images) of the LCDs has been notoriously inferior. This defect of LCDs therefore has been the major research and development focus both throughout academic and industrial arenas, and various techniques for improving the retardation of the LCDs have been disclosed.

On the other hand, the development of the backlight modules mainly focuses on how to enhance the uniformity and brightness of the light provided by the backlight module. But recently, as the LED-based, direct lit solution has become the main steam technology for backlight modules, there are interests in utilizing the fast switching speed of the backlight LEDs to improve the LCD's dynamic response.

Shen ¶8

To achieve the objective, the present invention mainly tries to solve the issue that, when a scanline of the pixels of the LCD device is enabled (i.e., scanned), the grey levels of the pixels have to undergo a transient period before they reach their targeted level. The method of the present invention turns off the line of LEDs behind the currently enabled scanline so that the transient behavior of the liquid crystal molecules are less obvious, thereby enhancing the dynamic response of the LCD device. There are various embodiments of the present invention. For one type of embodiments, in accordance with the top-down scanning of the

(Dkt. No. 119 at 11 (citing Dkt. No. 106-7)).

Plaintiff disagrees that Defendants' citations to Groot Hulze '451" and Shen '732 are actually responsive to Plaintiff's source code citations. Specifically, Plaintiff argues that "the fact that Samsung filed its Motion for Leave to Supplement Invalidity Contentions to add the Groot

Hulze '451 reference on November 2, 2023, proves that the addition of the Groot Hulze '451 reference is completely unrelated to Polaris' [later-served] First Supplemental Infringement Contentions.” (Dkt. No. 106 at 9). Effectively, Plaintiff contends that because Defendants previously sought to add Groot Hulze '451 on a different basis (purported claim scope disclaimer) prior to Plaintiff's source code amendments, that necessarily means that Defendants' addition of the reference cannot now be responsive to Plaintiff's source code amendments. The Court disagrees. This Court's handling of a similar situation in *GREE, Inc. v. Supercell Oy* is instructive.<sup>1</sup> In *GREE*, this Court found under an identical provision to Paragraph 3(a)(ii) that even though the defendant “certainly should have known about [the prior art references it sought to add],” defendant would not be precluded from adding them where it “credibly explains that [plaintiff]'s amendment forced it to reevaluate its defense and, for the first time, anticipate needing the proposed references based on what it believed was a change in [plaintiff]'s infringement theory.” *Id.* at \*2. Defendants have provided just such an explanation here.

A reference can be responsive to both a purported disclaimer before the PTAB and also to subsequent source code amendments made to a plaintiff's infringement contentions. While Plaintiff contends that this result is improper because “it would incentivize defendants to withhold the production of source code and trickle it out throughout fact discovery so that defendants could freely amend their contentions at any time,” the Court is unconvinced that such concern applies here.<sup>2</sup> (Dkt. No. 106 at 12). Moreover, adopting Plaintiff's rationale that simply seeking prior leave to add a reference forever bars that reference's addition on a different basis would create its own host of issues, including opportunities ripe for gamesmanship and abuse. Here, it is undisputed

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<sup>1</sup> No. 2:19-CV-00161-JRG-RSP, 2020 WL 6730900 (E.D. Tex. June 25, 2020).

<sup>2</sup> If the plaintiff believes a defendant is improperly withholding source code, the appropriate method for resolving this dispute is to seek assistance from the Court in the form of a motion to compel.



that Defendants previously moved for leave to add Groot Hulze '451 to their invalidity contentions under P.R. 3-6(b), which this Court denied without prejudice as premature. (Dkt. No. 103). However, that is not dispositive of Defendants' new amendments under Paragraph 3(a)(ii). Plaintiff fails to convincingly rebut Defendants' explanation for how Groot Hulze '451 is in fact responsive to Plaintiff's source code amendments. As such, the Court finds that Defendants' addition of the Groot Hulze '451 reference was properly made pursuant to Paragraph 3(a)(ii).


As to the Shen '732 reference, Plaintiff argues that it "cannot be responsive to Polaris' First Supplemental Infringement Contentions which added source code citations because the Shen '732 reference does not provide a description of software functionalities." (Dkt. No. 106 at 11). Defendants respond that "[t]his argument misrepresents the Shen reference," because "Shen discloses functionalities, specifically '[a] method for controlling a LED-based, direct-lit backlight module of a display device,'" and "these functionalities may be implemented using software run on controller hardware." (Dkt. No. 119 at 13 (quoting Ex. N (Shen) at Claims 1, 8, 12)).

The Federal Circuit has instructed that where "the function to be performed by software has been identified, writing code to achieve that function is within the skill of the art." *Keynetik, Inc. v. Samsung Elecs. Co., Ltd.*, No. 2022-1127, 2023 WL 2003932, at \*2 (Fed. Cir. Feb. 15, 2023). The Court is unpersuaded by Plaintiff's argument that the Shen '732 reference cannot be responsive simply because it does not specifically disclose software functionality, especially where it is otherwise undisputed that Shen '732 discloses functionality responsive to the source code cited by Plaintiff. As such, the Court finds that Defendants' addition of the Shen '732 reference was properly made pursuant to Paragraph 3(a)(ii).

### III. CONCLUSION

Having found that Samsung's Second Supplemental Invalidity Contentions, including the citations to the Groot Hulze '451 and Shen '732 references, were properly served pursuant to Paragraph 3(a)(ii), the Court finds that Plaintiff's Motion should be and hereby is **DENIED**.

**So ORDERED and SIGNED this 9th day of July, 2024.**

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE